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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/789,594	02/27/2004	Norihiko Shinomiya	FUSKA 20.991	9065
26304 7590 10/17/2007 KATTEN MUCHIN ROSENMAN LLP			EXAMINER	
575 MADISON			DUDA, ADAM K	
NEW YORK, NY 10022-2585			ART UNIT	PAPER NUMBER
			4181	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
•	10/789,594	SHINOMIYA, NORIHIKO				
Office Action Summary	Examiner	Art Unit				
	Adam K. Duda	4181				
The MAILING DATE of this communication app		the correspondence address				
Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICA 36(a). In no event, however, may a reply vill apply and will expire SIX (6) MONTHS cause the application to become ABANI	TION. be timely filed  from the mailing date of this communication.  DONED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 2/27/	<u>2004</u> .					
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ This	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.					
•						
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 1	1, 453 O.G. 213.				
Disposition of Claims						
4)⊠ Claim(s) <u>1-18</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-18</u> is/are rejected.						
7) Claim(s) is/are objected to.	7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/or	r election requirement.					
Application Papers .						
9) The specification is objected to by the Examine	r ·					
10)⊠ The drawing(s) filed on <u>2/27/04</u> is/are: a)⊠ accepted or b)⊡ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correcti	ion is required if the drawing(s)	is objected to. See 37 CFR 1.121(d).				
11)☐ The oath or declaration is objected to by the Ex	aminer. Note the attached O	ffice Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign	priority under 35 H.S.C. & 11	19(a)-(d) or (f)				
a) All b) Some * c) None of:	priority under 05 0.0.0. § 11	(1) (1).				
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the prior	ity documents have been red	ceived in this National Stage				
application from the International Bureau	ı (PCT Rule 17.2(a)).					
* See the attached detailed Office action for a list	of the certified copies not rec	ceived.				
·						
Attachment(s)  1) Notice of References Cited (PTO-892)	4) Interview Sum	man/(PTO-413)				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/M	ail Date				
3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date	5) Notice of Information (6) Other:	mal Patent Application				

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## **Detailed Action**

## Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: "Communication Path Restoration Method Based on Pre-Planned Network Node Configuration".

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1-18 rejected under 35 U.S.C. 102(b) as being anticipated by Fujii et al. in the paper titled "A Study on path Restoration Method Based on Pre-Planned Configuration".

Consider claims 1 and 13, Fujii et al. teach determining an alternative communication path (page 4, Abstract; teaches of determining and alternate communication path) in a communication network built with a plurality of network nodes (Figure 1; teaches of a plurality of network nodes), comprising: assuming

that a network failure occurs at a location in a current communication path through the network nodes (The paper, titled "A Study on path Restoration Method based on Pre-Planned Configuration" teaches of alternate communication path establishment after a network failure); determining a failure detected network node that detects the network failure, out of the network nodes (page 4, Detection of Failure; teaches that the failure is detected by the adjacent node); calculating a failure notification time (i.e. reception and transmission time) for each network node, the failure notification time indicating a time from when a failure notification message is transmitted by the failure detected network node until the each network node receives the failure notification message; (pages 10-12, Results of Simulation; teaches of the reception and transmission treatment times which dictate the modification) selecting a first network node out of the network nodes based on the failure notification time, the first network node being positioned in the current communication path on upper stream (i.e. single direction) from the location of the network failure (page 9 teaches how the notification is done in a single direction each time corresponding to the failure detected point); and determining an alternative communication path that includes the first network node and a second network node out of the network nodes, the second network node being positioned in the current communication path on down stream from the location of the network failure (page 9; teaches how an alternative communication path is determined in a single direction (i.e. upstream and downstream) corresponding to the failure detection point. Figure 3 illustrates the idea).

Consider claims 2, 8 and 14, Fujii et al. teach wherein the failure notification time of the first network node (i.e. first node after the failure) is the shortest of the network nodes that are positioned on upper stream (i.e. flow direction) from the location of the network failure (pg 4, Abstract; teaches how the failure is detected the fastest on an adjacent upstream node due to the interruption of the signal).

Consider claims 3, 9, and 15, Fujii et al. teach wherein the failure notification time (i.e. time due to failure) of the first network node is smaller than a predetermined time (page 4, Abstract; teaches of the notification time due to interruption of a signal resulting in high speed treatment).

Consider claims 4, 10, and 16, Fujii et al. teach wherein the alternative communication path allows to share an auxiliary (i.e. additional) communication capacity for other network failure (Figure 1; teaches how current use 1 and current use 2 paths share an auxiliary communication line which can become Alternate 1 / Alternate 2).

Consider claims 5, 11, and 17, Fujii et al. teach wherein the failure notification time is calculated as a sum of a propagation delay time of a communication link between the network nodes and a processing time for inputting/outputting the failure notification message (i.e. reception and transmission times) in the each network

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node (page 10-12, Results of Simulation; teaches of how performance of the

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restoration system was checked by simulation).

restoration of communication).

Consider claims 6, 12, and 18, Fujii et al teach further comprising calculating a recovery time (i.e. time to realize restoration) of the communication path as a sum of the failure notification time (i.e. reception and transmission times) of the first network node, a switching time (i.e. cross connect time) of each network node on the alternative communication path, and a propagation delay of a signal to be transferred (pages 10-12, Results of Simulation; Figure 5; teach of the time to realize

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